

What is claimed is:

1. A semiconductor radiation detector element of Schottky barrier type, comprising: a compound semiconductor crystal including cadmium and tellurium as main components; and voltage application means for applying
5 voltage to the compound semiconductor crystal, said voltage application means including a compound of indium, cadmium and tellurium: $\text{In}_x\text{Cd}_y\text{Te}_z$ formed on one surface of the compound semiconductor crystal.

2. A semiconductor radiation detector element of Schottky barrier type according to claim 1 in which the rate "z" of occupation of tellurium in the
10 compound of indium, cadmium and tellurium: $\text{In}_x\text{Cd}_y\text{Te}_z$ is within the range of not less than 42.9%, but not greater than 50% by ratio of number of atoms.

3. A semiconductor radiation detector element of Schottky barrier type according to claim 1 in which the rate "y" of occupation of cadmium in the compound of indium, cadmium and tellurium: $\text{In}_x\text{Cd}_y\text{Te}_z$ is within the range of
15 not less than 0%, but not greater than 10% by ratio of number of atoms.